

## PM1000F Features



- Patented Single Cycle Adaptive Storage recording process provides extremely high resolution and Proper Time waveforms down to single cycle over long recording periods
  - Records and displays up to 16 channels of voltage, current, power, power factor, VAR's, phase angle, frequency, THD, and Flicker. Over 50 individual measurements.
  - 3 flashing red / green Light Emitting Diodes give status information when the PM1000 is recording.
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- Authoritative Flicker measurements to IEC61000-4-15
  - It includes Instantaneous Flicker Sensation
  - Records the total level of harmonics in both the voltage and current signals.
  - Fully automatic operation on site - no user skill required - simply plug it in and leave.
  - 'PMScreens', a virtual screen on the PC for setting up your logger and for real time review of your data
  - The PM1000 gives you high speed chart type data on the voltage supply (down to 1 cycle resolution)
  - Pre-stored configurations are set for single phase hook ups with several channels pre-configured for power and harmonic measurements
  - On-screen HELP guides users through configuration
  - Capable of storing up to 127 configuration or data files
  - Data Storage includes an additional internal flash memory for field programmable upgrades
  - RS232, with MODBUS ASCII protocol or modem communications
  - Compact and light, the instrument is robust and comes with a protective boot and carrying bag.
  - Best value Single Phase Power Quality Analyser and Flicker meter: capable of recording long term.

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## PM1000F Specification

**Input Voltage:** 2 channels, 0-270 Vac, Live to Neutral and Neutral to Earth

**Input Current:** 1 channel, ranges 0-1000 A rms and 0-50 A rms. Sensing using a flexible Rogowski Coil. Also works with standard CT's

**Channels:** 16

**Accuracy:** Volts and wide range current < 0.25% True RMS +/-2 LSB's excluding sensors. Narrow range current < 1% True RMS excluding sensors

**Resolution:** Programmable to 0.1 Vac and 0.1 Aac or 0.01V and 0.01A high resolution mode

**Maths Channels:**

**AC 1 Phase:** RMS, Stray Voltage RMS Hi Res < 35V, Real power W, Reactive Power VARS (fund), Apparent Power VA, Power Factor PF, Phase Angle, Frequency, Instantaneous Flicker Sensation, Short Term & Long Term Perceptibility, Flicker Flag

**Harmonics:** Total Harmonic Value, % Total Harmonic Distortion

**Other Maths Option:** Channel X \* Constant, Channel X / Channel Y, Filtered Channel X, Internal Temperature, On Charge, Battery Volts

**Sampling:** Continuous sampling at 64 samples per cycle;

**Recording:** Single cycle True RMS response time; 16 bit simultaneously sampling all signals

**Recording Mode and Rate:**

**Adaptive Store:** Unique store management enables extended recording & single cycle resolution on significant signal

changes

**Point Store:** Selectable from single cycle rate to once every 12 hours

**Memory:** 1 MB RAM

**Data Retention:** Back-up battery provides 1 month's retention @ 25°C (77°F) from a full charge

**Power:** Runs and charges via an input to 'Voltage Input Channel 1' of 100-270 Vac

Battery: 4 AA Ni-Cad battery pack & 1 Lithium button cell  
Battery ride through: 10 minutes at a time. Operation from fully charged battery with no ac mains power present > 5 hrs at 25°C

**Safety & Standards:** IEC 61010, CE, IEC 61326 (EMC), IEC 61000-4-15

**Internal fusing:** PSU, Battery stack, fused voltage lead

**Communications:**

User Interface: 3 status LEDs (Power on, Voltage in spec, Recording /Memory)

**Serial Port:** Serial infra red port, (up to 115.2K baud); isolation >2.5 kV

**Protocol:** MODBUS ASCII

**Computer Requirements for Pronto Software:** Windows 98, ME, NT4, XP, 2000, Pentium class processor or higher, 32 MB RAM,

**Case:** Rectangular box enclosed in a protective boot.

Dimensions: 215 mm x 116 mm x 45 mm including boot.

**Weight:** 900 gm including boot

**Operating Temp:** -10° C (14° F) to 60°C (140° F)

## PM1000F Kit



- PM1000 Power Quality Analyser with Flicker
- Infra Red Serial Download Cable
- Mains lead
- Protective Boot
- Carrying bag
- Pronto for Windows Analysis Software
- Customer CD with Operation Manual
- 24" 1000Amp Flexible Rogowski Coil (max conductor size 8") Optional

For further information and help please contact:

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